



Building the Pipeline:

Sacramento City College – Allied Health Learning Community

Crucial Conversations

Looking at Perspectives That Drive Us

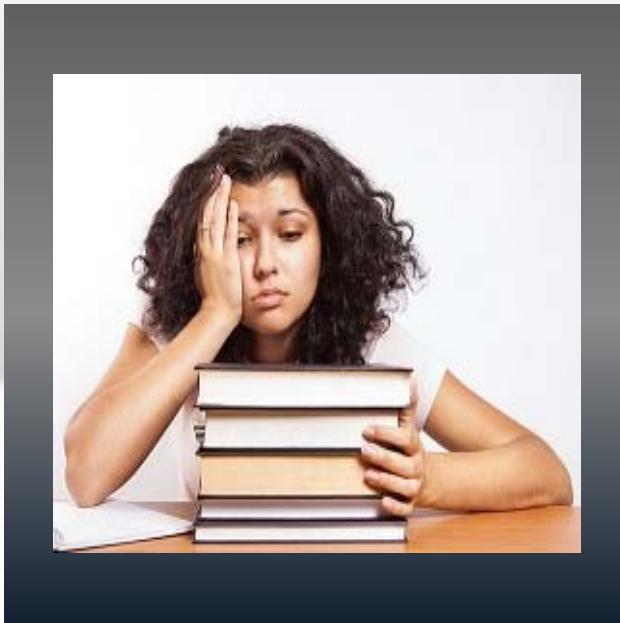


“For [students] the challenge is personal and immediate: if they can’t get the education they need, then they can’t get a job that pays the rent, read the rental lease, or calculate the monthly budget. If they don’t succeed, there are real consequences—for them as individuals and for all of us as a society. This problem is not just one of depressing statistics, but of people whose life chances rise or fall depending on their performance in our community colleges.”

(Bueschel, 2008)

Crucial Conversations

Looking at Life Experience

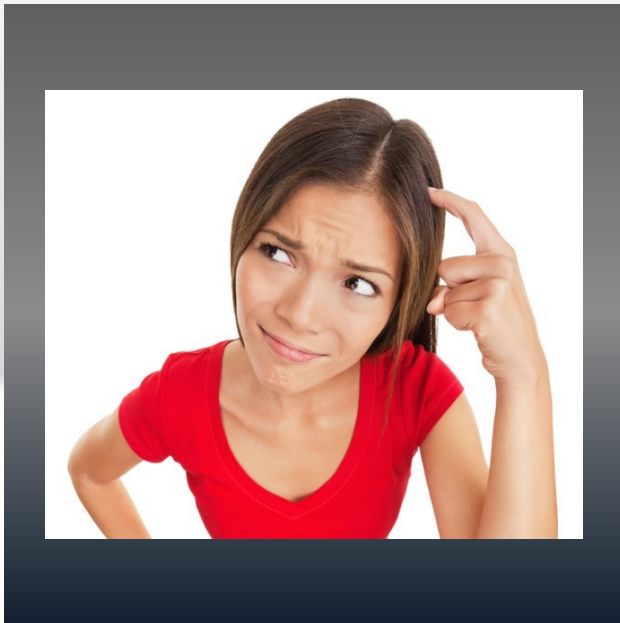


“At the same time that traditional students are expanding their role mastery to develop a fine-tuned understanding of each professor’s expectations, first-generation students may still be struggling simply to understand the [general] expectations.”

(Collier & Morgan, 2007)

Crucial Conversations

Looking at Academic Experience

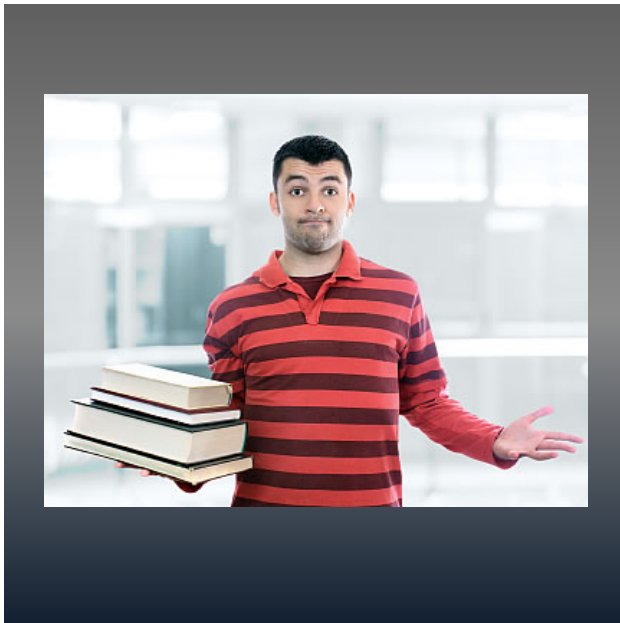


“Declarative and procedural knowledge are not the same, nor do they enable the same kinds of performance. It is common, for instance, for students to know facts and concepts but not know how or when to apply them.”

(Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010)

Crucial Conversations

Looking at Transition



“Although a generalized set of expected student behaviors exists, how these change as one moves from high school to college is not well articulated. Moreover, specific expectations likely vary between institutional types, as well as between colleges of the same type, or even among different disciplines or specific faculty members.”

(Karp & Bork, 2012)

Crucial Conversations

Looking at Articulation

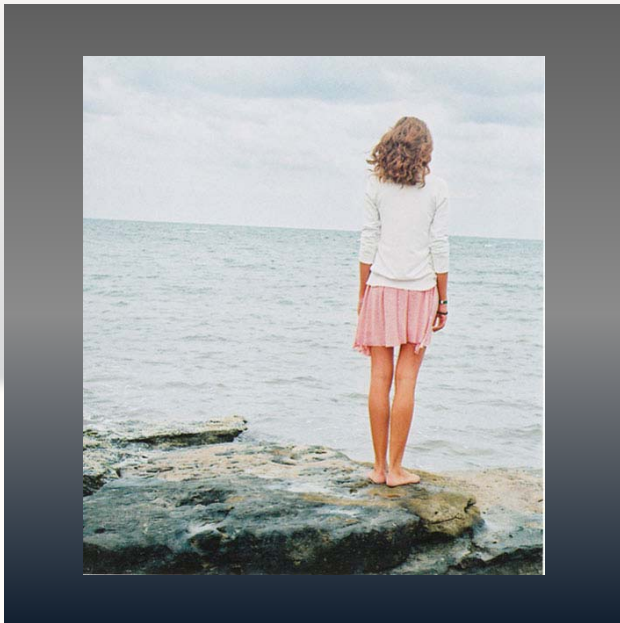


“Embrace opportunities for college faculty to establish and attend articulation dialogues with their high school counterparts centered on student learning outcomes, effective pedagogy, and the building of shared assessment strategies. Strong administrative support should follow to ensure the formalization of articulation agreements and establish or modify existing procedures to implement seamless and streamlined articulation protocols.”

(Borach & Hope, 2009)

Crucial Conversations

Looking at the Developmental Factors

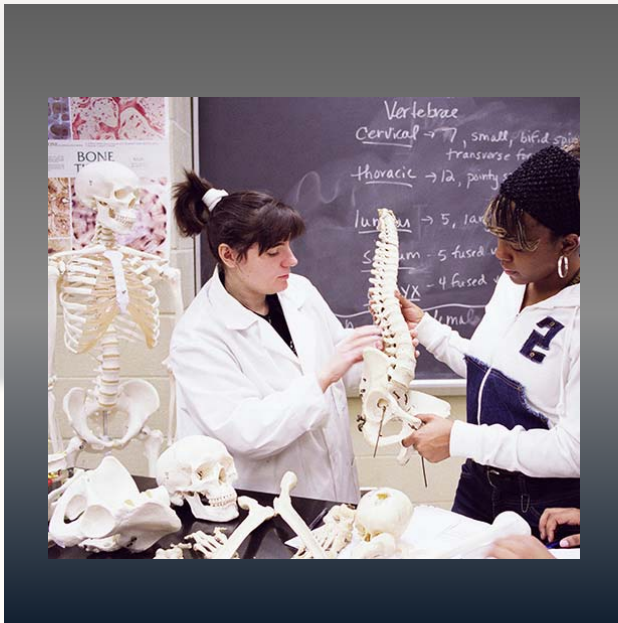


“Emerging adulthood has become a distinct period of the life course for young people in industrialized societies. It is a period characterized by change and exploration for most people, as they examine the life possibilities open to them and gradually arrive at more enduring choices in love, work, and worldviews.”

(Arnett, 2000)

Crucial Conversations

Looking at Teaching and Learning



“A primary theoretical perspective that underpins many of the recent advancements in community college practice is a shift in classroom dynamics toward a view of the student as the key agent in the learning process. Traditional classroom instruction has been predicated on the active role of the instructor and the passive role of the student. However, there exists a growing awareness that ... placing students in inert roles in abstract contexts are unlikely to advance the development of non-traditional learners.”

(Baker, Hope, & Karandjeff, 2009)

Crucial Conversations

Looking at Innovation

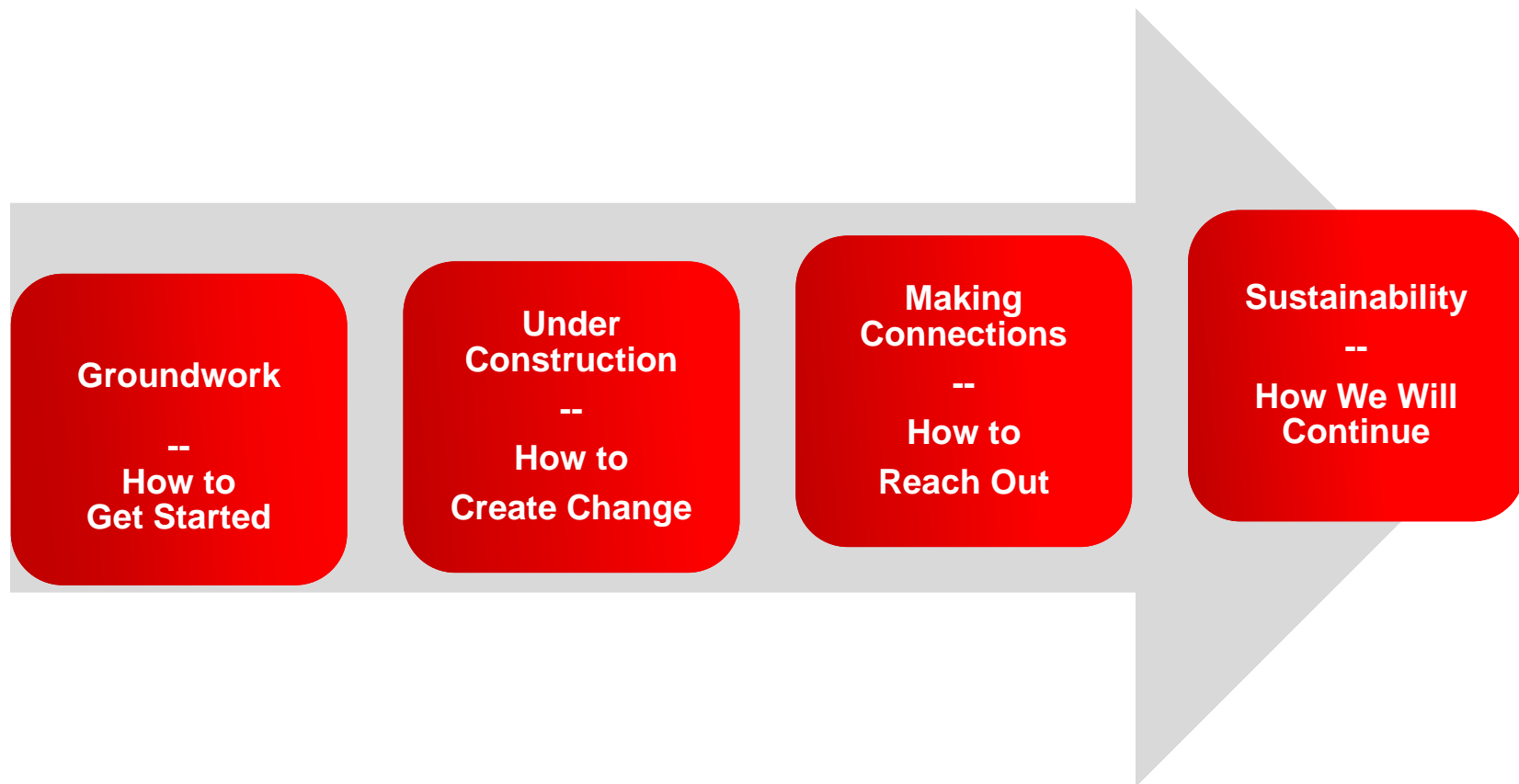


“Congresswoman Suzanne Bonamici (D-OR) and Congressman Aaron Schock (R-IL) have announced the formation of the Congressional STEAM (STEM+Arts and Design) Caucus. The group will host briefings and advocate for policy changes that will encourage educators to integrate arts, broadly defined, with traditional [STEM] curriculum. The goal is to encourage the creativity needed to drive our innovation economy forward.”

(Bonamici, 2013)

Building the Pipeline

Overview of the AHLC Process



Groundwork:

How to Get Started

Values

1

Creativity – Reflection – Diversity – Solutions

Vision

2

The Allied Health Learning Community at Sacramento City College provides a supportive and diverse community where students and faculty work collaboratively, learn collectively, and succeed as one. The AHLC offers students the opportunity to gain valuable cognitive, technical, and social skills that set them on the course for lifelong learning.

Mission

3

The Sacramento City College Allied Health Learning Community uses a collaborative, multi-disciplinary approach to develop and deliver linked and contextualized curriculum, supported by contemporary learning theories and integrated support services. Students are provided with opportunities to engage in active learning, in a collaborative environment, and to develop creative problem-solving abilities, addressing concepts relevant to skills for success in Allied Health careers. Faculty share their passion and innovative teaching approaches to support the students as they develop their strengths. The AHLC seeks to create change in educational systems and traditional pathways, driven by our core values, towards our common purpose and goals.

Groundwork:

How We Got Started

1

First interdisciplinary faculty group convened in December 2011 with the goal of entering the first cohort of students in Summer 2012.

2

Planning sessions addressed: course sequence, program admission requirements, necessary content skills, preparation, linking and capstone projects, professional developments needs.

3

Aside from program planning, many of the initial conversations were about the age of the incoming students, faculty's perception of the student's readiness, and redefining the responsibilities of faculty to meet this challenge.

4

A values-based decision-making approach was adopted, via identification of personal values and finding shared values, which led to the development of the AHLC vision and mission statements.

5

Guest speakers came to give their perspectives on developing learning communities, linked and contextualized learning, and pedagogy.

6

Over time, conflicting perspectives on faculty's roles and methods began to merge into compromises and a willingness to stretch into new viewpoints and methods.

7

We went into the first cohort knowing we didn't have all the answers, but with a commitment to learning and adapting as the process unfolded, keeping in the front of our minds the needs of the students.

Under Construction:

How to Create Change

Acquire Data

1

Collecting diverse and accurate data informs program changes with a comparatively short turn-around period, helping to address both short- and long-term needs of students and faculty.

Advance Practice

2

To be a content expert is not enough to be an effective teacher. Faculty have entered into an on-going process of learning towards the goals of personal, professional, and program development.

Acknowledge Issues

3

When there's a better way, pursue it. To be innovative requires active and nimble procedures to create change. We have embraced problems as a way to seek new attitudes, methods, and strategies.

Under Construction:

How We Have Changed

1

Assessment: we have the college's basic skills placement assessments and The STEM-Score, and are introducing the assessment of prior knowledge, but know we want and need more measures to individualize support needs.

2

Sequence and scheduling: we continue to debate and refine the course sequence, how to distribute rigor over time, look at the developmental needs of the students, and identify appropriate exit points based on career choice.

3

Professional development: we have developed a continuum of professional development topics driven by faculty input, supported by outside agencies providing perspective.

4

Leadership structure: we have decentralized our leadership structure to include four faculty co-leaders, each with an area of focus (curriculum, research, outreach, counseling).

5

Learning supports: we have embedded counseling, embedded second faculty in basic skills, cognitive and perceptual exercises, flipped classes, and shared office hours.

6

STEM to STEAM: we have included an art instructor to support the cognitive and perceptual development needs in whole brain learning, spatial skills required for success in math and science, and as an expressive outlet.

7

Accepting we are not there yet: we know we do not have every need met, but we persist in addressing issues, strategy development, improved curriculum, and student support.

Making Connections:

How to Reach Out

Build Scaffolding

1

The only way to build a connection between systems is to understand all the players, not just some. This includes knowing their responsibilities and challenges. It starts with the frontline participants, build from the bottom up, not administered from the top down.

Bridge Systems

2

Educational systems have many similarities and differences. Understanding these and the academic standards and related mandates are critical to mindful problem-solving. Convene the players responsible for doing the work, for they are the experts at their jobs.

Believe It Can Work

3

In spite of challenges, to become discouraged does not move the process forward. This is an overwhelming process that will require persistence. There is a better way. It can be done. It is matter of organizing all the right pieces in the right configuration.

Making Connections:

How We Have Reached Out

1

WHO? Anyone who will listen. Students, other faculty, administration, other disciplines, those from other schools and systems, organizations committed to education reform.

2

WHAT? Viewpoints, needs, various approaches, innovation, challenges, demographics, readiness, career opportunities, strategies, soft skills, emerging adulthood, basic skills, teaching methods.

3

WHEN? Every chance we get, making sure we are on all the email lists, attending every conference or workshop, creating our own events, initiating conversations with administration, visiting students in their classes.

4

WHERE? Anywhere someone will listen.

5

WHY? We can visualize a continuum of learning that addressed the needs of the emerging adult that bridges our educational systems, a continuum driven by common goals, language, expectations, and outcomes.

6

There are multiple parties who want to participate in the process of reshaping health education. There are many resources and we continue to search to ensure we have made connections with as many as possible.

7

Our next concerted effort will be to build a faculty community of practice with local high schools, helping them to develop their own cohort of teachers and beginning to more formally build the bridge between two systems.

Sustainability:

How to Continue

Curriculum

1

Curriculum needs to be innovative, contextualized, and linked, yet align with the demands of the system in which it is offered. An AS degree program is in the early stages of development, one that can be used in other community colleges. Additional allied health courses may be of benefit.

Collaboration

2

Sharing within the college is critical for sustainability. Support from faculty and administration is vital to expansion of the program. In addition, outreach to high schools and other colleges is central to program development, as these are key partners in the regional system of learning.

Creativity

3

Just as we tell our students, it's not about finding the answer, it's about solving the problem. Rather than issues becoming barriers, use collective strengths to create solutions that meet the needs of multiple stakeholders, solutions that are innovative and progressive.

Sustainability:

How We Will Continue

1

We have introduced into the curriculum process an associate degree in Allied Health, “Core Education for Allied Health Careers.” It formalizes the AHLC pilot curriculum, a critical step for generalizing into existing programs.

2

We are working within Title IV requirements by scheduling necessary AHLC courses that have multiple sections. Open access is maintained by having great than 50% of seats available to non-program students.

3

Continuing to identify and expand the use of multiple measure assessments is essential to ensure that we are gathering valid program data that accurately guides program changes and enhancements.

4

Working with our partners high schools in basic skills, academic literacy, college readiness, and curriculum development will ensure that supports for all students are being used or are in development.

5

Advancing integrated professional development for all faculty, to include pedagogy, developmental needs of young adult learners, application of contemporary learning theories, and methods for contextualizing and linking.

6

Applying fundamentals of universal design to preparatory and core curriculum, to support students with varied learning styles, interests, expression of knowledge, and agency along the academic continuum.

7

For the elements that remain dependent on grant funding, we will modify or create curriculum and leadership models that can be sustained with existing academic systems, while showing the efficacy of alternate practices.

Building the Pipeline

AHLC – Cohort 1

Age			Prior College			Ethnicity		
17	21	57%	≤ 3 units	32	87%	Hispanic/Latino	23	62%
18	13	35%	3-10 units	3	8%	Caucasian	5	14%
19	2	5%	> 10 units	2	5%	Two or More	3	8%
20	0	0%				Unknown	3	8%
≥ 20	1	3%				African American	1	2.7%
						Asian	1	2.7%
Total	37					Hawaiian/ Pacific Islander	1	2.7%

Building the Pipeline

AHLC – Cohort 1

	Cohort 1	Attrition	Back-Fill
Summer 2012	37	- 6	-
Fall 2012	38	- 10	+ 7
Spring 2013	31	- 7	+ 3
Summer 2013	24	- 5	+ 0
Fall 2013	19	-	+ 0

Building the Pipeline

AHLC – Lessons Learned

- 1 Course sequence was changed, and may well be changed again.
- 2 Students entering must meet minimum enrollment criteria.
- 3 Early recruitment is critical to meet course caps.
- 4 Back-filling solves one problem but creates others.
- 5 Basic skills workshops are not helpful. Support students in vivo.
- 6 Enculturate in first semester to the roles and expectations of the program.
- 7 Assessment should focus on basic skills, STEM-related skills.



Building the Pipeline

AHLC Course Sequence – Cohort 1

Summer	Fall	Spring	Summer	Fall	Spring
AH 110	BIOL 100	BIOL 430	HCD 499	BIOL 431	BIOL 440
ENGRD 312	CHEM 309	FCS 324	MATH 124	BIOL 342	COMM 301
HCD 330	HCD 310	HCD 299	PSYC 300	ENGWR 300	HIST 310
BS Workshop	SOC 300	MATH 123	BIOL Workshop	HCD 299	HCD 299
	BS Workshop	NUTRI 300		Humanities	PE
7.0	14	15	7	15	12

Building the Pipeline

AHLC Course Sequence – Cohort 2

Summer	Fall	Spring	Summer	Fall	Spring
AH 112	AH 110	CHEM 309	BIOL 440	BIOL 430	BIOL 342
AH 295	BIOL 100	FCS 324		ENGWR 300	BIOL 431
ENGWR 101	BIOL 290	FITNS 371		PHIL 310	COMM 301
	HCD 310	MATH 120		PSYCH 300	HIST 310
	NUTRI 300				
	SOC 300				
9.0	15.5	14	4	14	14

Building the Pipeline

AHLC Approaches – Embedded Support

ENGWR 101	AHLC Summer 2013	Typical
Pass Rate	90%	50%
Staffing	72 hrs LEC + 18 hrs LEC	72 hrs LEC

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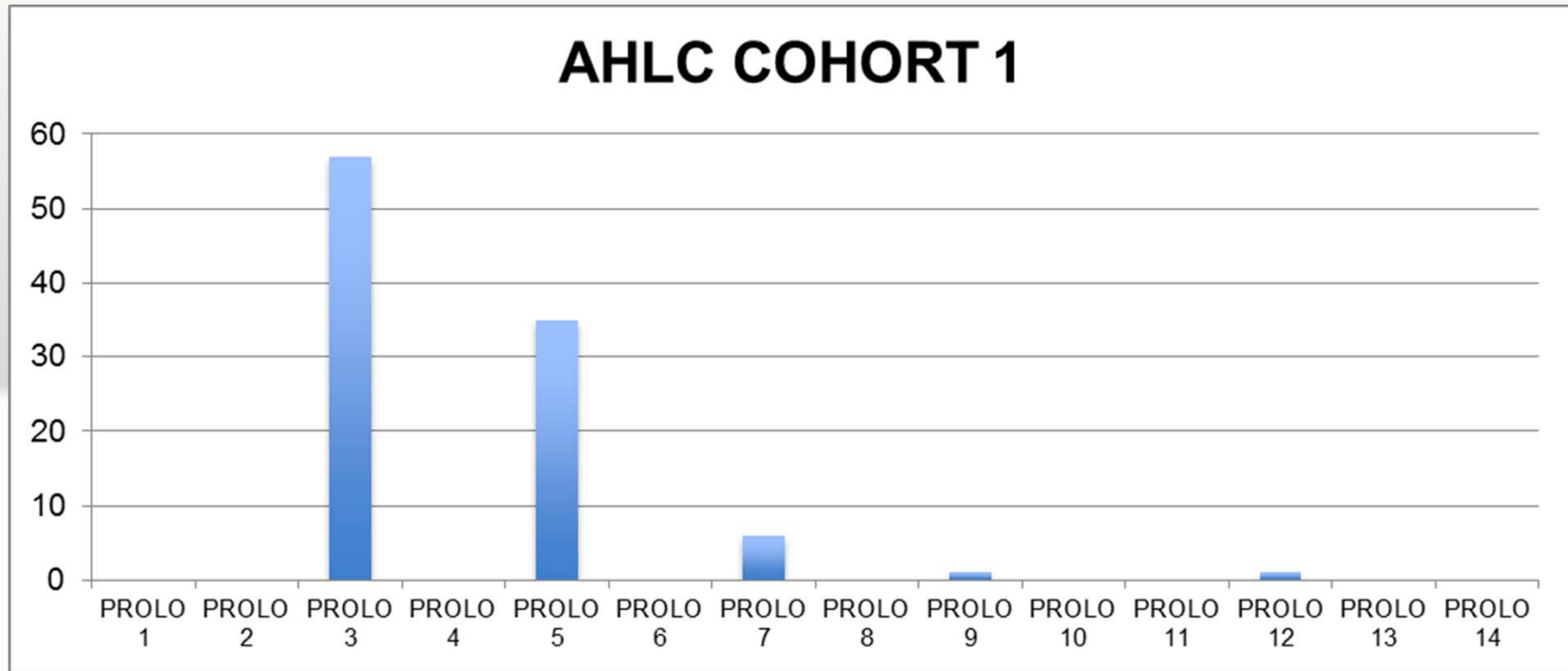
AHLC Program Learning Objectives

Upon completion of this program, the student will be able to:

1. adhere to safety protocols and proper lab techniques, including infection control.
2. comply with relevant legal and regulatory requirements in academic and clinical situations.
3. demonstrate professionalism in a range of interactions and settings, with respect for diversity and disability.
4. apply ethical considerations to a variety of situations, including patient care and scientific decision-making.
5. demonstrate self-responsibility as part of an academic community and a health care team.
6. identify areas for “soft skill” development for professional development.
7. receive feedback as a tool for personal and professional growth.
8. articulate career options and necessary educational pathways.
9. express knowledge of current scientific and social issues affecting health care systems.
10. state concepts of patient-centered and culturally competent health care.
11. demonstrate literacy skills in a range of disciplines, including reading, writing, math, information, and health.
12. distinguish between subjective viewpoints and objective data.
13. use qualitative and quantitative methods to interpret data.
14. use evidence as a foundation for critical thinking and decision-making.

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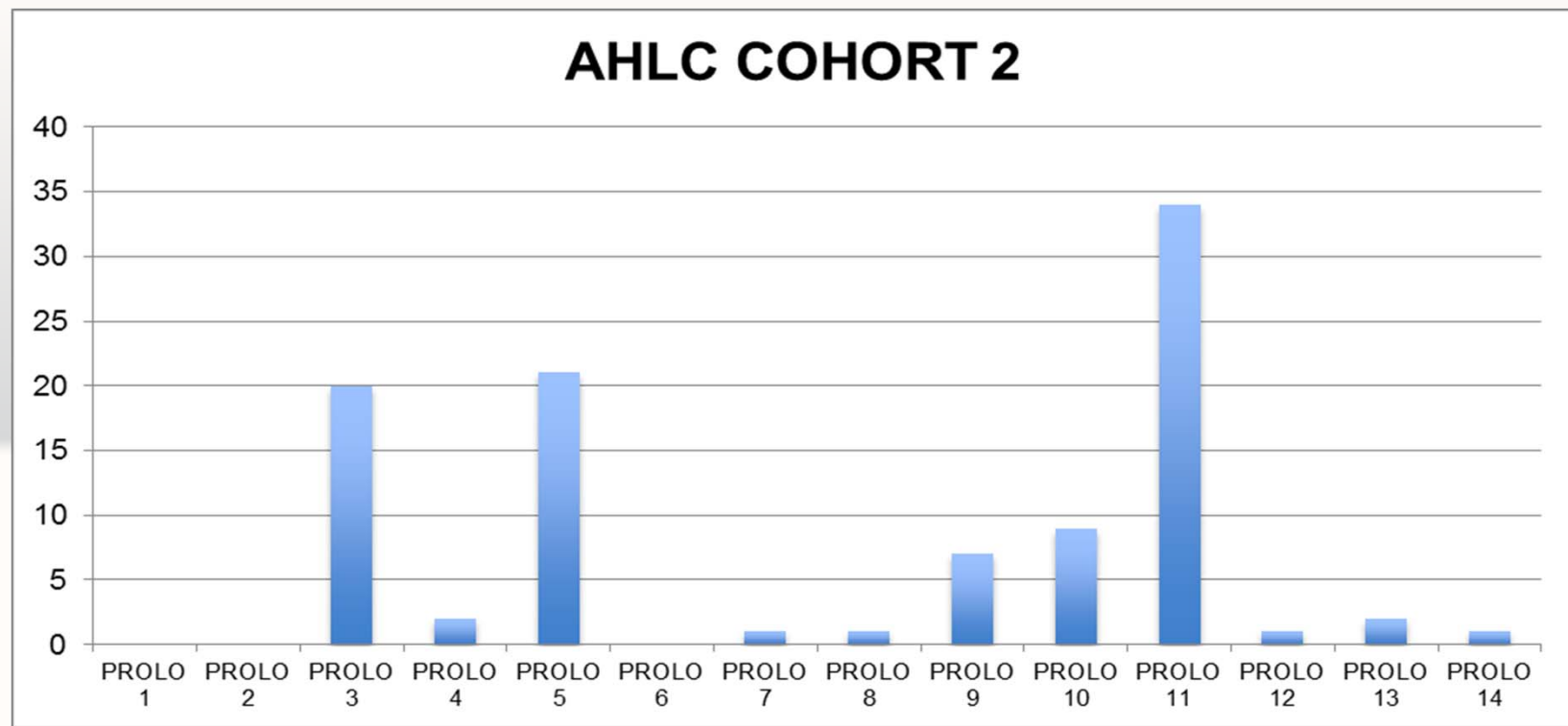
AHLC Approaches – Enculturation



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AHLC Approaches – Enculturation



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STEM-Score Assessment

Spatial Ability

1

Assesses mental manipulation of 2D and 3D objects, identified as critical to STEM success.

Proportional Reasoning

2

Assesses skill for developing a relationship between qualitative and quantitative elements.

Pitch Pattern

3

Assesses perception of pitch and phonological awareness, both necessary for language acquisition.

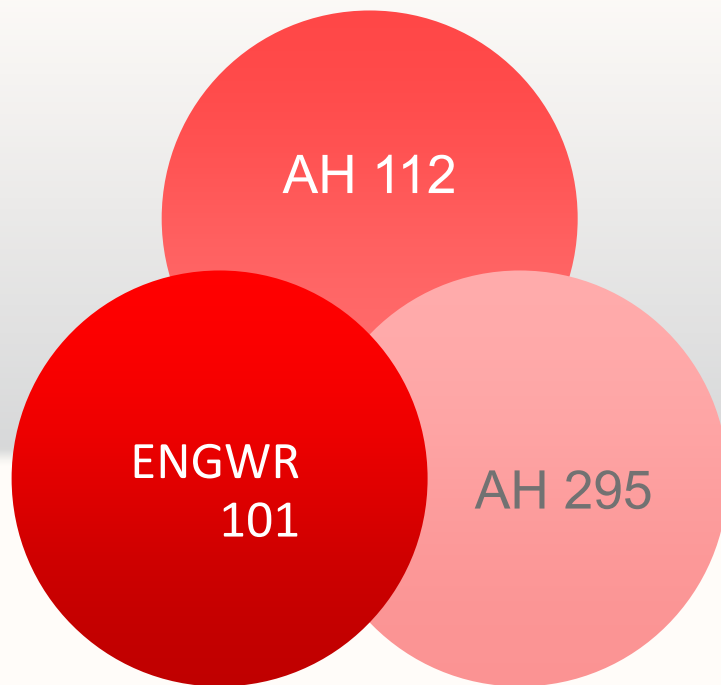
STEM-Score Assessment

Developed by Paul deGennaro, PhD

This is a non-verbal assessment that provides an alternative to traditional college basic skills placement measures. This measure of STEM aptitude, has provided the AHLC with a significantly different view of program students. Accurately predictive of Cohort 1 performance, the STEM-Score Assessment is one aspect of AHLC evaluation.

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AHLC Approaches – Contextualization and Linking



This Health Careers Brochure combines multiple features from three areas to address multiple allied health career options.

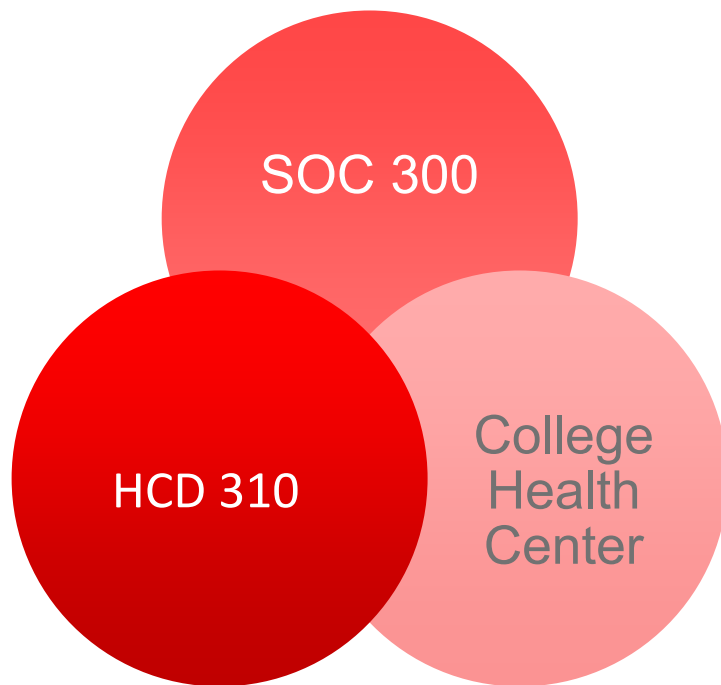
AH 112 addresses the use of multiple web-based resources for career interest development.

ENGWR 101 focuses on written materials that are professional.

AH 295 planning and time management for team projects.

Building the Pipeline

AHLC Approaches – Contextualization and Linking



This Service Learning Project combines multiple features from three areas to advocate for The Great American Smokeout.

HCD 310 addresses planning, time management, and prioritization.

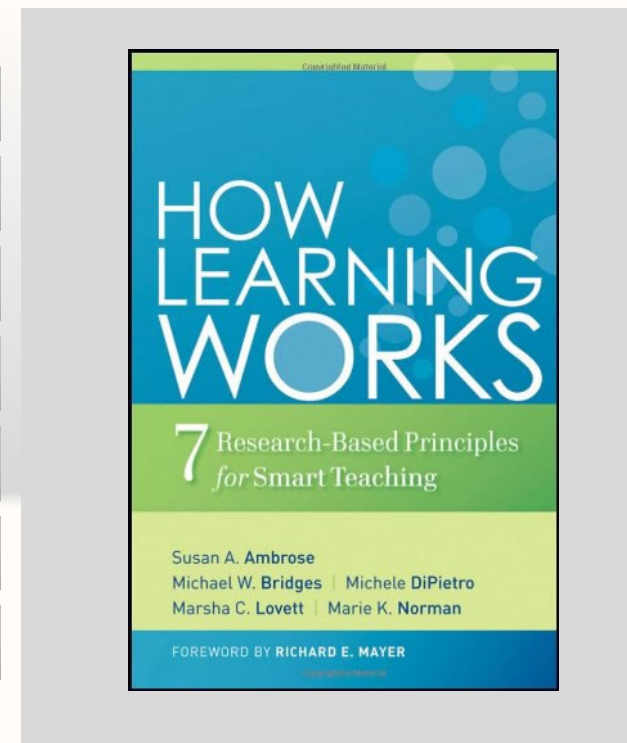
SOC 300 looks at the societal implications of smoking.

The Health Center provides materials and training to participate in smoking cessation advocacy.

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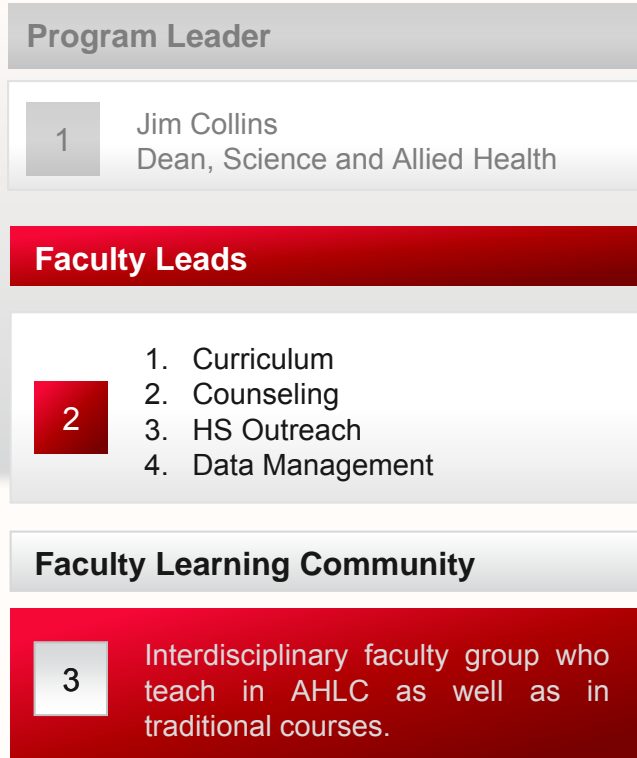
AHLC Approaches – Focused Professional Development

- 1 PRIOR KNOWLEDGE INFLUENCES LEARNING
- 2 ORGANIZATION OF KNOWLEDGE AFFECTS LEARNING
- 3 MOTIVATION DIRECTS AND SUSTAINS
- 4 INTEGRATE AND APPLY COMPONENTS
- 5 GOAL-DIRECTED PRACTICE / TARGETED FEEDBACK
- 6 CURRENT LEVEL OF DEVELOPMENT / ENVIRONMENT
- 7 SELF-DIRECTED LEARNERS MONITOR AND ADJUST



Building the Pipeline

AHLC Leadership Structure



Multiple Stakeholders:

- The students
- Their families
- The high schools
- The colleges
- Funding agencies
- Our colleagues
- Other disciplines
- Future employers
- Future patients
- Taxpayers

THANK YOU!

from
the students and faculty of the

**Sacramento City College
Allied Health Learning Community**